

APPLICANT(S): GLUKHOVSKY, Arkady et al.
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AMENDMENTS TO THE CLAIMS:

Please amend the claims to read as follows. The Listing of claims replaces all prior versions and Listings of claims in the application:

Listing of Claims:

- 1 (Currently Amended) A method for ~~sensing~~ calculating a temperature change in vivo, the method comprising:
 - introducing in vivo an image sensor having an image sensing module;
 - sensing the dark current noise of the image sensing module;
 - obtaining a dark current data sample;
 - comparing a dark current data sample of the sensed dark current noise to a previous sample; and
 - ~~determining~~ calculating the temperature change in vivo according to the comparison.
- 2 (Currently amended) A system for ~~sensing~~ calculating a temperature change in vivo comprising:
 - an image sensor;
 - an integrating unit; and
 - a change detector;
 - said image sensor being introduced in vivo; and
 - said integrating unit receiving dark current noise samples from the image sensor, and said change detector detecting changes between said dark current noise samples and ~~determining~~ calculating the temperature change in vivo according to the changes.
- 3 (Currently Amended) A method for ~~sensing~~ determining a temperature change in vivo, the method comprising:
 - introducing in vivo an image sensor;
 - sensing the dark current noise of the image sensor;
 - obtaining [[a]] dark current data ~~sample~~ samples of the sensed dark current noise; and

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determining a change in temperature in vivo according to the dark current data samples.

4. (Currently Amended) A device for ~~sensing~~ determining a temperature change in vivo, the device comprising:
an image sensor;
a controller to accept a dark current noise of the image sensor, to obtain ~~[[a]]~~ dark current data ~~sample-samples~~, and to determine a change in temperature in-vivo according to the dark current data samples.
5. (Previously Presented) A method according to claim 1, wherein the image sensor is contained within an autonomous in vivo device.
6. (Previously Presented) A method according to claim 1, comprising displaying the in vivo temperature.
7. (Currently Amended) A ~~method~~ system according to claim 2, wherein communication between said integrating unit amplifies said dark current noise samples received from said image sensor by said integrating unit.
8. (Currently Amended) A system according to claim 2, wherein said image sensor and said ~~integrated~~ integrating unit are controlled according to an illumination condition.
9. (Currently Amended) A ~~system~~ method according to claim 3, wherein the image sensor is contained within an autonomous in vivo device.
10. (Previously Presented) A method according to claim 3, wherein said image sensor comprises a CMOS.
11. (Previously Presented) A device according to claim 4, wherein said image sensor senses the dark current noise during a dark period.
12. (Previously Presented) A device according to claim 4, wherein said image sensor communicates with said controller during periods when said image sensor is not illuminated.